

## 4. Carla

**Program Name:** Carla.java

**Input File:** carla.dat

In the UNIX operating system, Carla has recently learned, each file, directory, or link is “owned” by a “user”, who is a member of a “group”, and has certain “permissions” assigned to it, represented by a 10-character string, such as “drwxrwxrwx”. The first character is ‘d’, ‘-’, or ‘l’ (directory, file, or link), followed by three sets of “rwx” values, indicating “read, write, execute” permissions. The first set is the user’s rights, the middle set the group’s rights, and the third everyone else’s rights to that object.

Permission denied for any of these rights is represented by a ‘-’ in place of the ‘r’, ‘w’, or ‘x’. For example, a sample directory permission string would be “drwxr--r--“, indicating full directory rights for the user, but “read-only” rights for the group member and all others.

Each “rwx” combination can also be represented by an octal value ( 0-7 ), as shown below:

<u>Octal value</u>	<u>r w x combination</u>	<u>Interpretation</u>
0	- - -	No permission
1	- - 1	Execute permission only
2	- 1 -	Write permission only
3	- 1 1	Write and execute permission
4	1 - -	Read-only permission
5	1 - 1	Read and execute only
6	1 1 -	Read and write only
7	1 1 1	Full permission

Given a four-character code string made up of a character ‘D’, ‘F’ or ‘L’, followed by a 3-digit octal integer value, like 664, output the resulting 10 character string that represents the permission value indicated.

**Input:** Several four-character codes as described above, each on one line.

**Output:** The resulting 10-character string based on the criteria described above.

**Sample input:**

```
F664
D775
L334
F530
D127
```

**Sample output:**

```
-rw-rw-r--
drwxrwxr-x
l-wx-wxr--
-r-x-wx---
d--x-w-rwx
```